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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,285	10/27/2004	Lionel Breton	112701-432	6015
7590	08/29/2006			EXAMINER BARNHART, LORA ELIZABETH
Robert M Barrett Bell Boyd & Lloyd P O Box 1135 Chicago, IL 60690-1135			ART UNIT 1651	PAPER NUMBER

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/505,285	BRETON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lora E. Barnhart	1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 June 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 9 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendments***

Applicant's reply filed 6/26/06 has been entered. Claims 30-48 were cancelled therein, while claims 1-8 and 10-29 were canceled in a previous reply. Claim 9 remains pending in the current application and is being examined on the merits. Prior art references not included with this Office action can be found in a prior action.

***Election/Restrictions***

Applicant's reply to the requirement for election of species mailed 6/6/06 is noted. Regarding applicant's comments at page 3, paragraph 2, of the reply, the examiner wishes to point out again for the record that an election of species does not necessarily "unduly narrow" a claimed invention. Once a generic claim becomes allowable, applicants are entitled to rejoinder of all species in claims including the limitations of the parent generic claim. M.P.E.P. §§ 821.04(a) and 806.04(h). A requirement for the election of a species is for search purposes only to speed the examination process.

Claim 9 ONLY is being examined on its merits.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 remains rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites “a photoprotecting effective amount”, which is confusing. It is not clear whether the pet or the food is to be photoprotected. Clarification is required. In the interest of compact prosecution, “photoprotecting effective amount” has been interpreted as “amount effective to protect a pet from at least one wavelength of light to some extent under some conditions.” This limitation was addressed in the Office action mailed 12/5/05, but the amendments do not clarify this issue, and applicants’ remarks are silent as to this limitation. The examiner suggests “a photoprotecting effective amount” be amended to recite, “an amount effective to photoprotect said pet,” such that the link between the pet and the amount is clear.

Finally, the phrase “at least one carotenoid or derivatives thereof” is not particularly defined in the specification. It is noted that at page 5, line 31, through page 6, line 6, applicant provides some examples of carotenoid derivatives and points out some functions and sources of said derivatives, it is not clear which compounds are encompassed by this phrase and which are excluded thereby. Clarification is required. Again, this limitation was addressed in the Office action mailed 12/5/05, but the amendments do not clarify this issue, and applicants’ remarks are silent as to this limitation. The scope of “carotenoid derivatives” is not clear.

#### ***Double Patenting***

The double patenting rejections are withdrawn in light of the terminal disclaimer filed by applicant over Applications 10/505,305 and 10/504,906, said disclaimer received 3/22/06 and approved by the Office 3/29/06.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 9 remains rejected under 35 U.S.C. 102(b) as being anticipated by Shields, Jr. et al. (2000, U.S. Patent 6,156,355). The claim is drawn to a food composition comprising a photoprotecting effective amount of at least one probiotic lactic acid bacterium, at least one yeast, and at least one carotenoid or a derivative thereof, included in an ingestible carrier.

Shields, Jr. et al. teach dog food formulations comprising dried yeast, vitamin A, beta carotene, probiotic bacteria (*Lactobacillus acidophilus* and *Enterococcus faecium*), and fermentation extracts of probiotic bacteria (*Bacillus subtilis*, *Aspergillus oryzae*, and *Aspergillus niger*), as well as numerous sources of protein, fat, and fiber (Examples 5 and 6; note in particular column 21, lines 48-49; 50-51; 54; and 60-63).

Shields, Jr. et al. do not specifically address the photoprotective properties of their food composition. Since the composition of Shields, Jr. et al. and the instantly claimed composition are substantially identical in composition, they inherently possess the same properties. M.P.E.P. § 2112 recites, "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430,

433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. See also *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). As discussed above, applicants do not particularly define the term "photoprotecting effective amount" within the specification, so the composition of Shields, Jr. et al. reads on the instant claim.

Applicants allege that Shields, Jr. et al. do not teach a composition comprising a photoprotecting effective amount of the constituent components (Reply received 3/22/06, page 6, paragraph 1). Applicants further allege that Shields, Jr. et al. "fails to even recognize the photoprotecting effects of the claimed compositions" (*ibid.*). These arguments have been fully considered, but they are not persuasive.

To invalidate a patent by anticipation, a prior art reference normally needs to disclose each and every limitation of the claim. See *Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1369, 21 USPQ2d 1321, 1328 (Fed. Cir. 1991). However, a prior art reference may anticipate when the claim limitation or limitations not expressly found in that reference are nonetheless inherent in it. See *id.* and *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 630, 2 USPQ2d 1051,1053 (Fed. Cir. 1987). Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates. See *In re King*, 801

F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986). **Inherency is not necessarily coterminous with the knowledge of those of ordinary skill in the art.** See *Titanium Metals*, 778 F.2d at 780. **Artisans of ordinary skill may not recognize the inherent characteristics or functioning of the prior art.** See *id.* at 782. However, the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. See *id.* at 782 ("Congress has not seen fit to permit the patenting of an old [composition], known to others..., by one who has discovered its...useful properties."); *Verdegaal Bros.*, 814 F.2d at 633.

This court's decision in *Titanium Metals* illustrates these principles. See *Titanium Metals*, 778 F.2d at 775. In *Titanium Metals*, the patent applicants sought a patent for a titanium alloy containing various ranges of nickel, molybdenum, iron, and titanium. The claims also required that the alloy be "characterized by good corrosion resistance in hot brine environments." *Titanium Metals*, 778 F.2d at 776. A prior art reference disclosed a titanium alloy falling within the claimed ranges, but did not disclose any corrosion-resistant properties. This court affirmed a decision of the PTO Board of Appeals finding the claimed invention unpatentable as anticipated. This court concluded that the claimed alloy was not novel, noting, "it is immaterial, on the issue of their novelty, what inherent properties the alloys have or whether these applicants discovered certain inherent properties." *Id.* at 782. This same reasoning holds true when it is not a property, but an ingredient, which is inherently contained in the prior art. The public remains free to make, use, or sell prior art compositions or processes,

regardless of whether or not they understand their complete makeup or the underlying scientific principles which allow them to operate. The doctrine of anticipation by inherency, among other doctrines, enforces that basic principle." See *Atlas Powder Co. v. IRECO Inc.*, 51 USPQ2d 1943 (Fed. Cir. 1999).

Thus, a reference may be anticipatory if it discloses every limitation of the claimed invention either explicitly or inherently. A reference includes an inherent characteristic if that characteristic is the natural result flowing from the reference's explicitly explicated limitations. *Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1269, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991).

In the instant case, the photoprotection effect flows from the fact that the composition of Shields, Jr. et al. and the instant composition as claimed have identical constituent components. Thus applicants are incorrect in arguing that the anticipatory rejection is improper. M.P.E.P. § 2112 reads, "The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable." Something that is old does not become patentable upon the discovery of a new property, use, or application. Even if applicants had identified a property of the composition of Shields, Jr., et al. not appreciated by Shields, Jr., et al., the composition *per se* would not become patentable.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 9 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Shields, Jr. et al. The claim is drawn to a food composition as described above.

As discussed above, Shields, Jr. et al. teach dog food compositions comprising probiotic bacteria, yeast, and carotenoids. Shields, Jr. et al. do not explicitly teach photoprotecting effective amounts of probiotic bacteria or particular amounts of yeast or carotenoids.

The selection of the amount of probiotic bacteria, yeast, and carotenoids to be included in the composition of Shields, Jr. et al. would have been a routine matter of optimization on the part of the artisan of ordinary skill, said artisan recognizing that the amounts of these components may vary depending on the animal's dietary needs. Shields, Jr. et al. teach that the nutritional needs of dogs, for example, vary by breed type (column 4, line 63, through column 5, line 33). A holding of obviousness over the cited claims is therefore clearly required.

Therefore, the invention as a whole would have been *prima facie* obvious to a person of ordinary skill at the time the invention was made.

Applicants rely on arguments traversing the above rejection under 35 U.S.C. § 102(b) to traverse this rejection (3/22/06 Reply, page 6, paragraph 5). Therefore, the response set forth above to arguments also applies to this rejection.

Claim 9 also remains rejected under 35 U.S.C. 103(a) as being obvious over Baur et al. (2002, WO 02/28402) taken in view of Shields, Jr. et al. The claim is drawn to a food composition as described above.

The applied reference has a common assignee and one common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) **a showing under 37 CFR 1.132** that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference **under 37 CFR 1.131**; or (3) **an oath or declaration under 37 CFR 1.130** stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, **together with a terminal disclaimer in accordance with 37 CFR 1.321(c)**. This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Baur et al. teach that oral administration of  $10^9$  cfu/mL live or inactivated *Lactobacillus johnsonii* (La1) or *Lactobacillus paracasei* (ST11) to mice has a photoprotective effect in the context of ultraviolet-induced sensitivity to topical dinitrofluorobenzene (DNFB) application (Example 2). Baur et al. do not teach a composition comprising a photoprotecting effective amount of a probiotic lactic acid bacterium as well as yeast and carotenoids.

As discussed above, Shields, Jr. et al. teach dog food compositions comprising probiotic bacteria, yeast, and carotenoids.

A person of ordinary skill in the art would have had a reasonable expectation of success in coadministering the yeast and carotenoids of Shields, Jr. et al. with the photoprotecting probiotic bacteria of Baur et al. because Shields, Jr. et al. teach that compositions comprising all three components are suitable for ingestion by animals. The skilled artisan would have been motivated to combine the compositions of Baur et al. and Shields, Jr. et al. for the expected benefit that the photoprotecting effects of the Baur et al. bacteria could be achieved by feeding the animals a balanced diet formulation.

It would therefore have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the compositions of Baur et al. and Shields, Jr. et al. because Baur et al. teach that the photoprotecting La1 and ST11 may be included in yogurt and other fermented food products that provide complete nutrition, and because Shields, Jr. et al. teach combining probiotic bacteria, yeast, and carotenoids in a pet food composition.

Therefore, the invention as a whole would have been *prima facie* obvious to a person of ordinary skill at the time the invention was made.

Applicant alleges that under the 35 U.S.C. § 103(c) exception, Baur et al. is an improper reference in this obviousness rejection (3/22/06 Reply, page 6, paragraph 6). Applicant alleges that “the present application, Application Serial Number 10/743,609”, and Baur et al. were commonly owned at the time of the instant invention (*ibid.*). These arguments have been fully considered, but they are not persuasive.

The standard for applying the 35 U.S.C. § 103(c) exception to a reference has not been met in this case. As emphasized in **bold** type above, a declaration under 37 C.F.R. 1.132 as to the inventive entity of the Baur et al. reference; a declaration under 37 C.F.R. 1.131 that the instant invention predates the Baur et al. reference; a declaration under 37 C.F.R. 1.130 as to common current ownership of the two inventions, accompanied by a terminal disclaimer over the cited Baur et al. reference; or a persuasive showing that the Baur et al. reference is not acceptable prior art under 35 U.S.C. § 103(a) is required. A simple statement by applicant within the reply is insufficient. See M.P.E.P. § 706.02(l)(1) and § 706.02(l)(2). Until the requirements of 35 U.S.C. § 103(c) are fulfilled, the rejection stands.

***The claim is not allowed. The claim is not free of the art.***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lora E. Barnhart whose telephone number is 571-272-1928. The examiner can normally be reached on Monday-Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lora E Barnhart

LB

SANDRA E. SAUCIER  
PRIMARY EXAMINER